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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SINGH, GURKANWALJIT

ART UNIT

PAPER NUMBER

3624

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,794	Applicant(s) PRETORIUS ET AL.	
	Examiner Gurkanwaljit Singh	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060825</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This non-final Office action is in response to applicant's communication received on January 28, 2005, wherein **claims 1-9** are currently pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/522794, filed on January 28, 2005.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-6** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. The methods recited in **claims 1-6** are rejected under 35 U.S.C. 101 as being directed towards non-statutory subject matter based on Supreme Court precedent, and recent Federal Circuit decisions, *In re Bilski U.S. Court of Appeals Federal Circuit 88 USPQ2d 1385*. The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. See

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Benson, 409 U.S. at 70. Certain considerations are applicable to analysis under either branch. First, as illustrated by Benson and discussed below, the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See Benson, 409 U.S. at 71-72. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. See Flook, 437 U.S. at 590.

The methods recited in claims 1-6 are not tied to a machine nor transform the underlying subject matter to a different state or thing. See *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); and *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972).

A method/process claim that fails to meet the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. Here claims 1-6 fail to meet the above requirements because they are not tied to another statutory class of invention.

Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See Benson, 409 U.S. at 71-72. As *Comiskey* recognized, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." *Comiskey*, 499 F.3d at 1380 (citing *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir.1989)). Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal

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or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one.

6. **Claims 7-9** are drawn to a computer program per se. Computer programs per se intrinsically require no tangible physical structure, thus do not constitute tangible physical articles or other forms of matter. Therefore, computer programs per se are not considered to be statutory subject matter. To be statutory, a computer program must be: (1) coupled with or combined with some statutory physical structure, and, (2) produce or effect some useful, concrete, and tangible result.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eicher, Jr. et al., (US 2002/0099598) in view of Gil et al., (US 2002/0188486).

9. As per **claims 1 and 7**, Eicher discloses method of detecting abnormalities in a supply chain wherein items of a plurality of supply chain principals are transferred in an operational field from one supply chain participant to another through transfer

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transactions (Abstract [“performance-based supply chain management system for sending metalerts relative to a monitored key performance indicator... notified if a violation with respect to a key performance indicator occurs or is occurring”], claim 21 [“performance-based supply chain management system, the server system providing metalerting for deviations from key performance indicators being”], ¶¶ 0025, 0027, 0143, 0011-0015), the method comprising the steps of:

capturing in the operational field data relating to transfer transactions involving items of all the principals, utilizing distributed electronic data recording equipment; storing the captured transaction data in a central trusted database; (¶¶ 0018-0022 [“pre-set rules...data extraction...extraction engine”], 0028, 0077-0078, 0106 [“memory”], 0110, 0020 [“database”], 0029 [“A database cluster connects to the user interface web cluster and the data gateway cluster to access and store data to a database system...an application processing cluster connects to the database cluster to provide an application related to the events being monitored related to a buyer-supplier engagement”], 0108 [“the database cluster 1306 may be connected to a disk array database system 1308”], 0035, 0062-0063, 0070-0071, 0075, 0081-0084 [“the system enables users to track KPI performance by product lifecycle phase and build history...[t]his history is then used to suggest confidence levels”], 0094, 0105-0107);

processing the stored data utilizing a processor, to determine data relating to normal behavior in the chain (¶¶ 0025, 0027, 0143, 0011-0015, 0018-0022 [“pre-set rules...data extraction...extraction engine”], 0028, 0077-0078, 0106

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["memory"], 0110, 0020 ["database"], 0029 ["A database cluster connects to the user interface web cluster and the data gateway cluster to access and store data to a database system...an application processing cluster connects to the database cluster to provide an application related to the events being monitored related to a buyer-supplier engagement"], 0108 ["the database cluster 1306 may be connected to a disk array database system 1308"], 0035, 0062-0063, 0070-0071, 0075, 0081-0084, 0094, 0105-0107); and

determining by utilizing the processor whether new input data relating to transactions in the supply chain is indicative of behavior that deviates from the data relating to normal behavior, thereby to detect an abnormality in the supply chain (claim 21 ["performance-based supply chain management system, the server system providing metalerting for deviations from key performance indicators being"], ¶¶ 0018 ["Performance is preferably monitored automatically using pre-specified KPI's, pre-set business rules and thresholds"], 0025 ["provides alerts to buyers and suppliers regarding deviations from predetermined ranges for the key performance indicators"], 0027 ["Alerts may be generated based on deviations, violations, changes or any parameters with respect to the key performance indicators...the system may generate Metalerts relative to a monitored key performance indicator..."], 0084, 0071 ["a new component"], 0078, 0085, 0090-0092 ["new data is received...server analyses"], 0099, 0110, 0127, 0140-0144, 0151-0153).

Although Eicher discloses the above steps, Eicher does not explicitly disclose that the processing and determining steps are done utilizing a processor.

However, Gil discloses utilizing a processor to perform the steps of monitoring that alerts an entity when the reality of events or conditions in the supply chain deviates from an entity's plan or business process (¶¶ 0034, 0062-0064, 0069-0075).

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to include in the method/system of Eicher utilizing a processor as taught by the analogous art Gil, in order to efficiently automate the system of Eicher (Eicher: ¶¶ 0001, 0018, 0028, 0034, 0059, 0062; and Gil: ¶ 0034) since doing so could be performed readily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

10. As per **claim 2**, Eicher discloses the method above, wherein the capturing of the data is performed by an independent trusted party (Figs. 2, 4, ¶¶ 0054-0058).

11. As per **claims 3 and 8**, Eicher discloses the method above, however Eicher does not explicitly disclose wherein the captured data is encrypted before communication thereof to the central database.

Gil discloses wherein the captured data is encrypted before communication thereof to the central database (¶ 0051 [“encrypted”]).

Therefore, it would be obvious to one of ordinary skill in the art to include in the system/method of Eicher wherein the captured data is encrypted before communication thereof to the central database as taught by Gil since the claimed invention is merely a

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combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

12. As per **claim 4**, Eicher discloses the method above, wherein the captured data relating to each transfer transaction comprises a data collection comprising at least one of: data relating to the item, data relating to a receiver of the item, data relating to a transferor of the item, data relating to a time of the transaction and data relating to a place of the transaction (¶¶ 0018, 0069, 0095, 0113, 0150-0153, 0180, 0186).

13. As per **claim 5**, Eicher discloses the method above, wherein each data collection is associated with an integrity index relating to the integrity of the data collection and wherein the integrity index is utilized by the processor in at least one of said processing step and said determining step (¶¶ 0109, 0112, 0130).

14. As per **claim 6**, Eicher discloses the method above, wherein the processor is further configured to identify a group of new input data collections that is responsible for the indication of behavior that deviates from normal behavior, thereby to enable further scrutiny of the group of new input data collections (¶¶ 0063, 0071, 0097, 0113, 0176, 0180-0189).

15. As per **claim 9**, Eicher discloses the method above, wherein the system and network forms part of a trainable artificial intelligence decision making system (disclosed throughout the reference, for example see Abstract, ¶¶ 0018, 0028-0029, 0034, 0059, 0062, 0089, 0099, 0107, 0111, 0132-0134). However, Eicher does not explicitly disclose utilizing a processor.

Gil discloses utilizing a processor to perform the steps of monitoring that alerts an entity when the reality of events or conditions in the supply chain deviates from an entity's plan or business process (¶¶ 0034, 0062-0064, 0069-0075).

Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to include in the method/system of Eicher utilizing a processor as taught by the analogous art Gil, in order to efficiently automate the system of Eicher (Eicher: ¶¶ 0001, 0018, 0028, 0034, 0059, 0062; and Gil: ¶ 0034) since doing so could be performed readily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gurkanwaljit Singh whose telephone number is (571)270-5392. The examiner can normally be reached on Monday to Thursday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. S./
Examiner, Art Unit 3624
February 26, 2010

/Kambiz Abdi/
Supervisory Patent Examiner,
Art Unit 3684